**Further Mathematics Practice SAT 3**

Data on the total seasonal rainfall (in mm) have been accumulated over a 6-year period.

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| **Season** | **2004** | **2005** | **2006** | **2007** | **2008** | **2009** |
| Summer | 103 |  97 |   95 | 117 | 118 | 120 |
| Autumn |   93 |   84 |   82 | 100 |   99 |   98 |
| Winter | 143 | 124 | 121 | 156 | 155 | 151 |
| Spring | 123 | 109 | 107 | 125 | 122 | 124 |

1. Compute the seasonal indices.
2. Deseasonalise the original time series.
3. Plot the original and deseasonalised time series (CAS).
4. Seasonally adjusted, which was the wettest season?
5. If a drought is defined as four seasons of under 105 mm rainfall. Was there a period of drought during this recorded time?